Dabbs, Paul

From: Steve Bilson [stevebilson@earthlink.net]
Sent: Thursday, July 11, 2002 4:42 AM
To: Dabbs, Paul
Subject: Greywater irrigation in the Water Plan

Dear Mr. Dabbs:

I did not see any mention of the water that could come from greywater irrigation.

DWR wrote the Caliifornia greywater code in 1994 pursuant to AB3518 in 1992. The greywater code, aka Appendix G of the California Plumbing Code, legalized using shower, tub, bathroom sink, and laundry water in approved systems for underground drip irrigation.

According to numerous studies, water agency water-use data, and the prestigious American Water Works 1996 National End-Use Survey, greywater amounts to about 125 gallons of water per day, or 45,625 gallons per year, in an average 3.2-person household. The City of San Diego has found through monitoring real systems that this is true.

This is over half the water used inside a residence, thus it reduces sewage treatment costs, and subsequent chemical discharges, by that same amount. This relatively clean water is then used in underground drip irrigation.

According to the 1998 USDA analysis of 56 studies on the matter, undergr ound drip irrigation is at least 30% more efficient than sprinklers. Almost all residences use sprinklers for irrigation. This .3 efficency factor elevates the water available at a typical residence to 162 gallons per day, or 59,31 gallons per year. A typical residence needs almost exactly this much water per year for irrigation.

In addition to water and wastewater savings, greywater irrigation is backed by the Surfriders Foundation, Bay Keepers, Sierra Club, Natural Resources Defence Council, and many other environmental groups, because it eliminates irrigation run-off. Irrigation run-off carries fertilizers, animal feces, and silt into rivers, bays, and the ocean, and is the leading cause of water pollution in California.

The State Water Resources Control Board agreed with the City of Chula Vista that, when combining the values of water, wastewater reduction, and NPS pollution prevention, this source of water costs less than the retail cost of fresh water.

According to the Construction Industry Research Board in Burbank, over 100,000 homes are being built each year in California, along with over 40,000 multi-family dwellings. Most of these could use this technology. If all did, that would be a water savings of over 18,000 AF per year, or 360,000 AF in the 20th year.

It would be negligent to omit this form of water savings from the Water Plan.

Stephen Wm. Bilson
Chairman & CEO
ReWater Systems, Inc.